IN THE SPECIFICATION

Please replace the paragraph on page 17, lines 4-5 with the following:

In a preferred embodiment, the LAPTM4B-inhibitor is either a siRNA with the

sequences: AACATGTTGGTTGCAATCACT (A)(SEQ ID NO: 2) or

AAACTCCATTCAGGAATACAT (B)(SEQ ID NO: 3).

Please replace the paragraph on page 43, lines 26-27 with the following:

The sequences of the siRNAs used for LAPTM4B are:

AACATGTTGGTTGCAATCACT (A) (SEQ ID NO: 3) and

AAACTCCATTCAGGAATACAT (B)(SEQ ID NO: 3).

Please replace the paragraphs beginning on page 46, line 14 and ending on page 47,

line 8 of the specification with the following heading and replacement paragraphs:

Brief Description of the Drawings

Figure 1: Summary of the mouse tissue expression data as presented in GNF
SymAtlas v0.8.0 (available in the public domain at http:// under
"http://symatlas.gnf.org/terms.html", http://symatlas.gnf.org/SymAtlas/). It is shown that
significant levels of LAPTM4B are expressed in the brain. The high expression of
LAPTM4B in the brain supports the role of LAPTM4B in Alzheimer's disease.

Figure 2: SiRNA-mediated knock-down of LAPTM4B-expression attenuates
secretion of Aß1-42.

Fig. 2A: SiRNAs directed against BACE1, nicastrin, LAPTM4B (A or B) or Luc3
were transfected into SK-N-BE2 neuroblastoma cells over-expressing APP695. 48h after
transfection growth medium was removed and cells were incubated over night in serum-free
medium. Supernatants were collected and levels of Aß1-42 determined by ELISA
(Innogenetics). At least three independent experiments were performed in duplicate. A
representative example is shown.

Fig. 2B: SiRNAs directed against LAPTM4B (A and B), but not a siRNA directed against unrelated Luc2, specifically reduce protein levels of co-transfected TAP-LAPTM4B. No effect was observed on expression levels of the unrelated protein p65.

Figure 3: Amino acid sequence of human LAPTM4B (LYSOSOMAL ASSOCIATED TRANSMEMBRANE PROTEIN 4 BETA), depicted in the one-letter-code (SEQ ID NO: 1).

Figure 4: Multiple sequence alignment of mouse (m) and human (h) LAPTM4A and LAPTM4B including consensus sequence.

Figure 5: Schematic representation of TAP entry points (white) that LAPTM4B interacts with.

Please insert after the last page of the specification the attached Sequence Listing.

Please replace the Abstract with the substitute Abstract attached on a separate page hereto.